UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,977	02/16/2001	Israel Ben-Shaul	03394P005	1749

8791   7590   10/06/2004

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EXAMINER
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ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		09/785,977	BEN-SHAUL ET AL.	
		Examiner	Art Unit	
		Victor Lesniewski	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *16 February 2001*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-61* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-61* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *9/11/2001*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   This application has been examined.

2.   The preliminary amendment filed on 9/11/2001 has been acknowledged.

3.   Applicant's election without traverse of Group I, claims 1-61, filed on 8/2/2004 has been

acknowledged. Claims 62-91 are withdrawn from further consideration.

4.   Claims 1-61 are now pending.

Information Disclosure Statement

5.   The IDS filed on 7/6/2001 has been considered.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claims 1, 3-19, 21-25, 29, 31-33, 40, 42-55, 57, 58, 60, and 61 are rejected under 35

U.S.C. 102(e) as being anticipated by Leighton et al. (U.S. Patent Number 6,108,703),

hereinafter referred to as Leighton.

8.   Leighton has disclosed:

- <Claim 1>

  A content and application delivery system comprising: an origin web site having an

  origin web server, said origin web server having a first memory for storing a first version

  of a web content (column 6, lines 24-26); an edge server communicating via a data

  network with said origin web server (column 5, lines 60-64) and a policy control server

  (column 9, lines 31-47); said edge server having a second memory for storing a second

  version of said web content and deriving said second version from said origin web server

  according to directives of a service policy that resides at said policy control server, said

  edge server downloading said directives of said service policy from said policy control

  server via said data network (column 3, lines 4-9 and 17-24); wherein a request of a user

  directed to said origin web site for a resource from said web content is redirected to said

  edge server (column 3, lines 29-36), and responsive to said request a third version of said

  web content is provided to the user from said edge server, said third version being

  derived from said second version in accordance with said directives of said service policy

  (column 12, lines 26-34).

- <Claim 3>

  The system according to claim 1, wherein said directives of service policy are specified

  using an XML based language (column 5, lines 23-26).

- <Claim 4>

  The system according to claim 3, wherein said directives of said service policy include a

  description of resources of said origin web site (column 9, lines 48-54).

- \<Claim 5\>

  The system of claim 4 wherein said description of resources is specified using a resource definition framework, said resource definition framework having extensions comprising protocol, type, size, encoding convention, creation time, expiration time, keyword, target groups, an alternate URL for fetching said resources, and a location of a code for creating a dynamic resource; wherein said description of resources includes at least one of said extensions (column 9, lines 1-19).

- \<Claim 6\>

  The system according to claim 4 wherein said directives of said service policy include a description of users at a target site (column 9, lines 55-67).

- \<Claim 7\>

  The system of claim 1 wherein communication between said edge server and at least one of said policy control server and said origin web server is effected using an http protocol or an https protocol (column 3, lines 24-36).

- \<Claim 8\>

  The system of claim 1, wherein said origin web site comprises a plurality of origin web sites, and said first version is distributed in said plurality of origin web sites, defining thereby a distributed first version, said second version being derived from said distributed first version (column 6, lines 22-34).

- \<Claim 9\>

  The system of claim 1 wherein said policy control server comprises a plurality of web servers (column 9, lines 31-33).

- <Claim 10>

The system of claim 9, wherein said web servers are said origin web server, said edge

server and a server located at a third party site (column 6, lines 24-26 and column 5, lines

60-64).

- <Claim 11>

The system of claim 1, wherein said directives comprise a description of an edge server

group associated with said origin web site (column 9, lines 41-47).

- <Claim 12>

The system of claim 11, wherein said description of an edge server group includes

information concerning at least one of an organization type, geographical region,

language, business relation to said origin web site, edge server hardware capabilities,

edge server software capabilities, edge server security specifications, internet location

and internet connection speed of members of said edge server group (column 10, lines 1-

11).

- <Claim 13>

The system of claim 1, wherein said second version is derived from said first version by

the steps of: selecting resources from said first version according to predetermined

criteria comprising at least one of a resource URL, time of resource generation, length,

keyword list, target groups, data format, and key (column 9, lines 20-22); transforming a

selected resource in said second memory responsive to said directives, wherein said

directives comprise a description of an edge server group associated with said origin web

site to define a transformed selected resource (column 9, lines 41-47); and storing said

transformed selected resource in said second memory (column 12, lines 37-39).

- <Claim 14>

The system according to claim 13, wherein said second memory comprises a cache

memory (column 3, lines 50-57).

- <Claim 15>

The system according to claim 13, wherein said predetermined criteria comprise a

presence of updated resources in said first version that are absent in said second version

(column 7, lines 64-67).

- <Claim 16>

The system according to claim 1, wherein said service policy differentiates a resource of

said first version from a resource of said second version according to an attribute of said

edge server and an attribute of at least one of said first resource and said second resource

(column 8, lines 2-12).

- <Claim 17>

The system according to claim 16, wherein said attribute comprises at least one of a

caching priority, caching validation, a caching invalidation, preposition at a

predetermined time and preposition upon an occurrence of a predetermined event

(column 10, lines 19-27).

- <Claim 18>

The system according to claim 1, wherein said service policy differentiates a resource of

said second version from a resource in said third version according to at least one of

attribute of the user, attribute of the edge server, request time and attribute of the resource (column 11, lines 21-34).

- <Claim 19>

  The system according to claim 1, wherein one of said directives of said service policy instructs said edge server to redirect said request of said user to another web resource (column 12, lines 44-47).

- <Claim 21>

  The system according to claim 19, wherein said another web resource is external to said origin web site (column 12, lines 44-49).

- <Claim 22>

  The system according to claim 19, wherein said request is redirected by sending an http redirect instruction from said edge server to said user (column 13, lines 12-25).

- <Claim 23>

  The system according to claim 19, wherein said request is redirected to another resource by said edge server by modifying a URL portion of said request and loading the resource from the origin site (column 9, lines 8-19).

- <Claim 24>

  The system according to claim 19, wherein said request is redirected according to an attribute of the user (column 12, lines 40-49).

- <Claim 25>

  The system according to claim 1, wherein at least two of said first version, said second version, and said third version are identical (column 8, lines 52-61).

- \<Claim 29\>

   The system according to claim 1, wherein a resource of said first version is

   communicated by a first protocol to form a resource of said second version, wherein said

   resource of said second version is communicated by a second protocol to form a resource

   of said third version (column 1, lines 16-22).

- \<Claim 31\>

   The system according to claim 29, wherein said first protocol is identical to said second

   protocol, wherein parameters of said first protocol differ from parameters of said second

   protocol (column 8, lines 2-12).

- \<Claim 32\>

   The system according to claim 1, wherein said resource has an action defined therein, and

   said edge server performs said action (column 6, lines 4-13).

- \<Claim 33\>

   The system according to claim 32, wherein said action comprises execution of an

   application (column 6, lines 4-13).

- \<Claim 40\>

   The system according to claim 33, wherein said application is a web common gateway

   interface extension or a Java servlet (column 5, lines 5-13).

- \<Claim 42\>

   The system according co claim 1, wherein said edge server is in communication with an

   external web server via said data network, and a portion of said second version is

obtained from said external web server according to said service policy (column 12, lines 44-49).

- <Claim 43>

The system according to claim 1, wherein said resource is received by said edge server from said origin web server and stored therein, wherein said resource is modified prior to being stored in said edge server responsive to attributes of said edge server, said user, and said resource that are specified in said directives of said service policy (column 6, lines 41-46).

- <Claim 44>

The system according to claim 43, wherein said resource is modified by replacement thereof with a second resource that is local to said edge server (column 8, lines 52-61).

- <Claim 45>

The system according to claim 43, wherein said resource is modified by combination thereof with a second resource that is local to said edge server (column 3, lines 9-14).

- <Claim 46>

The system according to claim 43, wherein said resource is a web page that is modified by an operation consisting of at least one of frame insertion, textual or graphic insertion, html code insertion, link modification, embedded object modification, and adaptation of said web page to requirements of a browser (column 8, lines 2-12).

- <Claim 47>

The system according to claim 46, wherein a first URL in an embedded link of said web page is modified to define a second URL having a domain name value such that a routing

of said request using said second URL is directed to said edge server (column 8, lines 2-12).

- <Claim 48>

The system according to claim 1, wherein said request is modified according to edge server, user and resource attributes that are specified in said directives (column 9, lines 20-28).

- <Claim 49>

The system according to claim 48, wherein said request is modified by an operation consisting of at least one of an addition of user information to an http header of said request, adding a cookie to said request, modifying a URL of said request, modifying form content of said URL, modifying a body of said request, and adding password information to said URL (column 9, lines 8-19).

- <Claim 50>

The system according to claim 48 wherein said resource comprises a first URL, and said request is modified by an operation comprising modifying said first URL to define a second URL having a domain name value such that a routing of said request using said second URL omits said edge server (column 12, lines 44-49).

- <Claim 51>

The system according to claim 48, wherein said resource comprises a first URL, wherein in a first operation said first URL is modified to define a second URL having a domain name value such that a routing of said request using said second URL is directed to said edge server, and in a second operation said second URL is modified to define a third

URL having a domain name value such that a routing of said request using said third

URL omits said edge server (column 12, lines 44-49).

- <Claim 52>

The system according to claim 1 further comprising a DNS system associated with said

data network, and said request is redirected by said DNS system; wherein said DNS

system resolves a domain name that is included in said request for said resource, and said

DNS system provides the user with an address of one of said origin web server, another

web server that can serve the resource and said edge server (column 9, lines 31-47).

- <Claim 53>

The system according to claim 52, wherein said service policy differentiates said first

version from said second version according to at least one attribute of the user, attribute

of the edge server, request time and attribute of the resource (column 8, lines 2-12).

- <Claim 54>

The system according to claim 52, wherein said service policy differentiates said second

version from said third version according to at least one of an attribute of said user, an

attribute of said edge server, a request time and an attribute of the resource (column 11,

lines 21-34).

- <Claim 55>

The system according to claim 52, wherein at least two of said first version, said second

version, and said third version are identical (column 8, lines 52-61).

- \<Claim 57>

  The system according to claim 52, wherein said resource has an action defined therein,

  and said edge server performs said action (column 6, lines 4-13).

- \<Claim 58>

  The system according to claim 57, wherein said action comprises execution of an

  application (column 6, lines 4-13).

- \<Claim 60>

  The system according to claim 52, wherein said edge server is in communication with an

  external origin server via said data network, and a portion of said second version is

  obtained from said external origin server according to said service policy (column 5, lines

  33-37).

- \<Claim 61>

  The system according to claim 52, wherein said second version is obtained by said edge

  server from said origin web server according to a modification of a URL, said

  modification designating a portion of said first version in said origin web server (column

  8, lines 2-12).

Since all the limitations of the invention as set forth in claims 1, 3-19, 21-25, 29, 31-33, 40, 42-

55, 57, 58, 60, and 61 were disclosed by Leighton, claims 1, 3-19, 21-25, 29, 31-33, 40, 42-55,

57, 58, 60, and 61 are rejected.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

10.   Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Leighton.

11.   Leighton disclosed a global hosting system allowing content providers to replicate and

serve content to an unlimited number of points throughout the world. His representative system

contains a content provider aligned with a network of hosting servers where the content provider

is separate from the network. Although Leighton did not explicitly state that his content provider

could be combined with another type of web server or web resource, it would be a clear

extension of the system to allow this. Leighton points to the goal of replicating content over a

large network of distributed servers, preferably with no centralized control. See column 2, lines

31-36. Moving a policy control server or another web resource to the same point as the content

provider does not take away from Leighton's system and is a clear extension of any network

whose pieces may be distributed in various ways without altering functionality. Thus, it would

have been obvious to one of ordinary skill in the art at the time of the applicant's invention to

modify the system of Leighton by allowing for a policy control server or another web resource at

the same point as the origin web site.

12.   Thereby, Leighton discloses:

- <Claim 2>

  The system according to claim 1, wherein said policy control server is said origin web

  server (obviousness).

- <Claim 20>

  The system according to claim 19, wherein said another web resource is located at said

  origin web site (obviousness).

Since Leighton discloses all of the above limitations, claims 2-20 are rejected.

13.   Claims 26-28, 30, 34-39, 41, 56, and 59 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Leighton, as applied above, in view of Reed et al. (U.S. Patent Number

5,862,325), hereinafter referred to as Reed.

14. ·   Leighton disclosed a global hosting system allowing content providers to replicate and

serve content to an unlimited number of points throughout the world. In an analogous art, Reed

disclosed a control structure for a communications network in which transferred information

controls the responses by the client, the updating of information, and the processes for future

communications. Reed's system is designed to allow users of a content delivery system such as

Leighton's more control over the processing of information being transferred. See Reed, column

8, lines 51-63.

15.   Concerning claims 26-28 and 56, Leighton did not explicitly state the use of manipulation

techniques applied to web resources such as compression or encryption. However, Reed speaks

extensively about encoding in order to increase the communications value of data. He utilizes

encoding techniques in content delivery systems where data is being transferred from a server to

a client. Since the inventions encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Leighton by adding encoding techniques such as compression or encryption as provided by Reed. This would make sense because it would increase the quality of data transfers in Leighton's system.

16.   Concerning claim 30, Leighton did not explicitly state the use of ftp in his system. However, the file transfer protocol was well known in the art at the time of the applicant's invention. Furthermore, Reed demonstrates how ftp can be used to transfer data between servers. Since the inventions encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Leighton by adding the use of ftp for transferring data as provided by Reed. This would make sense because it was a well known way for servers to communicate data with each other.

17.   Concerning claims 34-38, 41, and 59, Leighton did not explicitly state the use of authentication techniques where information between the client and server is processed. However, Reed goes into great detail about different techniques that can be used to authenticate users. Since the inventions encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Leighton by adding authentication as provided by Reed. This would make sense because it would allow for more control options and create more security in Leighton's system.

18.   Thereby, the combination of Leighton and Reed discloses:

- <Claim 26>

    The system according to claim 1, wherein a group of resources of said first version is stored in a compressed form, and a corresponding group of resources of said second version is uncompressed by said edge server according to said directives (Reed, column 50, lines 25-46).

- <Claim 27>

    The system according to claim 26, wherein said group of resources of said first version is stored in a packed form, and said corresponding group of resources of said second version is unpacked by said edge server according to said directives (Reed, column 52, line 65 through column 53, line 3).

- <Claim 28>

    The system according to claim 1, wherein a resource of said first version is in an encrypted form, and a corresponding resource of said second version is decrypted by said edge server according to said directives (Reed, column 50, lines 25-46).

- <Claim 30>

    The system according to claim 29, wherein said first protocol is file transfer protocol and said second protocol is http (Reed, column 114, lines 12-35 and Leighton, column 1, lines 16-22).

- <Claim 34>

    The system according to claim 33, wherein said application is a web form processing application; wherein in a first step said edge server communicates a form to be completed

by the user; and in a second step parameters of said form are transmitted from the user to

said edge server (Reed, column 77, lines 58-66).

- <Claim 35>

The system according to claim 33, wherein said application is a user password processing

application; wherein in a first step said edge server triggers a password template to be

filled by the user; and in a second step form parameters of said password template are

transmitted from the user to said edge server (Reed, column 77, lines 58-66).

- <Claim 36>

The system according to claim 33, wherein instructions of said application cause said

edge server to identify an attribute of said user that is included in said request and to

return resources in said second memory of said edge server that are associated with a

URL of said request and said attribute of said user (Reed, column 77, lines 58-66).

- <Claim 37>

The system according to claim 36, wherein said attribute is identified in a request header

having a cookie, and said resources are defined in said directives of said service policy,

wherein said directives are stored in said edge server (Reed, column 78, lines 25-42).

- <Claim 38>

The system according to claim 33, wherein said application is a user password processing

application; wherein said edge server forwards said request to said origin web server and

delivers a user name and a user password to said origin web server; wherein responsive to

said user name and said user password said resource is transmitted by said origin web

server to said edge server (Reed, column 77, lines 58-66).

- <Claim 39>

  The system according to claim 38, wherein said resource is held in a cache by said edge

  server (Leighton, column 3, lines 50-57).

- <Claim 41>

  The system according to claim 1 wherein the user is a member of a group, and responsive

  to said request said edge server authenticates a membership of the user in said group

  (Reed, column 26, lines 12-27).

- <Claim 56>

  The system according to claim 52, wherein said first version is stored in a compressed

  form, and said second version is uncompressed by said edge server (Reed, column 50,

  lines 25-46).

- <Claim 59>

  The system according to claim 52, wherein the user is a member of a group, and

  responsive to said request said edge server authenticates a membership of the user in said

  group (Reed, column 26, lines 12-27).

Since the combination of Leighton and Reed discloses all of the above limitations, claims 26-28,

30, 34-39, 41, 56, and 59 are rejected.

Conclusion

19.   The prior art made of record and not relied upon is considered pertinent to the applicant's

disclosure.

- Farber et al. (U.S. Patent Number 6,185,598) disclosed a system for optimized network resource location that modifies resource identifiers.

- Skarbo et al. (U.S. Patent Number 6,317,777) disclosed a method for web-based storage and retrieval of documents.

- Jamtgaard et al. (U.S. Patent Number 6,430,624) disclosed a content delivery system that utilizes a re-formatting technique for different information appliances.

- Swildens et al. (U.S. Patent Number 6,484,143) disclosed a system for content distribution over a world wide area network.

- Bodin et al. (U.S. Patent Number 6,604,106) disclosed a method for enhancing server content delivery using compression.

- Labrinidis, Alexandros; and Roussopoulos, Nick, "Generating dynamic content at database-backed web servers: cgi-bin vs. mod_perl," SIGMOD Record, Volume 29, Number 1, March 2000, pgs. 26-31, disclosed scripting mechanisms for web servers that deliver dynamic content.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number currently is 703-308-6165, and beginning October 27 is 571-272-3987. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Victor Lesniewski
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Group Art Unit 2155

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER